

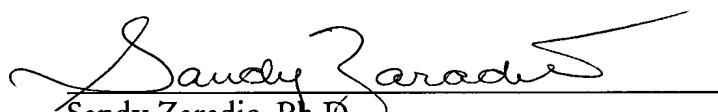
Applicant's Reference: **DX01042X**

Title of Invention: **MAMMALIAN CYTOKINES; RELATED REAGENTS
AND METHODS**

Applicant(s): **Birgit Oppmann, Rene De Waal Malefyt,
Donna M. Rennick, Robert A. Kastelein,
Maria T. Wiekowski, Sergio A. Lira,
Satwant K. Narula,**

Sequence Listing Statement

The undersigned attorney for applicant hereby declares that the information recorded on the diskette is identical in content to the information in the written Sequence Listing.


Sandy Zaradic, Ph.D.
Patent Agent
Registration No. 45997

SEQUENCE LISTING

<110> De Waal Malefyt, Rene
Kastelein, Robert A.
Lira, Sergio A.
Narula, Satwant
Oppmann, Birgit
Rennick, Donna M.
Wiekowski, Maria

<120> Mammalian Cytokines; Related Reagents and Methods

<130> DX01042X US

<140>

<141>

<150> 09/393,090
<151> 1999-09-09

<150> 60/164,616
<151> 1999-11-10

<160> 5

<170> PatentIn Ver. 2.1

<210> 1
<211> 570
<212> DNA
<213> Unknown Organism

<220>
<223> Description of Unknown Organism: surmised Homo sapiens

<220>
<221> CDS
<222> (1)..(567)

<220>
<221> mat_peptide
<222> (64)..(567)

<400> 1
atg ctg ggg agc aga gct gta atg ctg ctg ttg ctg ctg ccc tgg aca 48
Met Leu Gly Ser Arg Ala Val Met Leu Leu Leu Leu Pro Trp Thr
-20 -15 -10

gct cag ggc aga gct gtg cct ggg ggc agc agc cct gcc tgg act cag 96
Ala Gln Gly Arg Ala Val Pro Gly Gly Ser Ser Pro Ala Trp Thr Gln
-5 -1 1 5 10

tgc cag cag ctt tca cag aag ctc tgc aca ctg gcc tgg agt gca cat 144
Cys Gln Gln Leu Ser Gln Lys Leu Cys Thr Leu Ala Trp Ser Ala His
15 20 25

cca cta gtg gga cac atg gat cta aga gaa gag gga gat gaa gag act 192
Pro Leu Val Gly His Met Asp Leu Arg Glu Glu Gly Asp Glu Glu Thr
30 35 40

aca aat gat gtt ccc cat atc cag tgt gga gat ggc tgt gac ccc caa	240
Thr Asn Asp Val Pro His Ile Gln Cys Gly Asp Gly Cys Asp Pro Gln	
45 50 55	
gga ctc agg gac aac agt cag ttc tgc ttg caa agg atc cac cag ggt	288
Gly Leu Arg Asp Asn Ser Gln Phe Cys Leu Gln Arg Ile His Gln Gly	
60 65 70 75	
ctg att ttt tat gag aag ctg cta gga tcg gat att ttc aca ggg gag	336
Leu Ile Phe Tyr Glu Lys Leu Leu Gly Ser Asp Ile Phe Thr Gly Glu	
80 85 90	
cct tct ctg ctc cct gat agc cct gtg gcg cag ctt cat gcc tcc cta	384
Pro Ser Leu Leu Pro Asp Ser Pro Val Ala Gln Leu His Ala Ser Leu	
95 100 105	
ctg ggc ctc agc caa ctc ctg cag cct gag ggt cac cac tgg gag act	432
Leu Gly Leu Ser Gln Leu Leu Gln Pro Glu Gly His His Trp Glu Thr	
110 115 120	
cag cag att cca agc ctc agt ccc agc cag cca tgg cag cgt ctc ctt	480
Gln Gln Ile Pro Ser Leu Ser Pro Ser Gln Pro Trp Gln Arg Leu Leu	
125 130 135	
ctc cgc ttc aaa atc ctt cgc agc ctc cag gcc ttt gtg gct gta gcc	528
Leu Arg Phe Lys Ile Leu Arg Ser Leu Gln Ala Phe Val Ala Val Ala	
140 145 150 155	
gcc cgg gtc ttt gcc cat gga gca gca acc ctg agt ccc taa	570
Ala Arg Val Phe Ala His Gly Ala Ala Thr Leu Ser Pro	
160 165	
<210> 2	
<211> 189	
<212> PRT	
<213> Unknown Organism	
<223> Description of Unknown Organism: surmised Homo sapiens	
<400> 2	
Met Leu Gly Ser Arg Ala Val Met Leu Leu Leu Leu Pro Trp Thr	-20 -15 -10
Ala Gln Gly Arg Ala Val Pro Gly Gly Ser Ser Pro Ala Trp Thr Gln	
-5 -1 1 5 10	
Cys Gln Gln Leu Ser Gln Lys Leu Cys Thr Leu Ala Trp Ser Ala His	
15 20 25	
Pro Leu Val Gly His Met Asp Leu Arg Glu Glu Gly Asp Glu Glu Thr	
30 35 40	
Thr Asn Asp Val Pro His Ile Gln Cys Gly Asp Gly Cys Asp Pro Gln	
45 50 55	
Gly Leu Arg Asp Asn Ser Gln Phe Cys Leu Gln Arg Ile His Gln Gly	
60 65 70 75	
Leu Ile Phe Tyr Glu Lys Leu Leu Gly Ser Asp Ile Phe Thr Gly Glu	
80 85 90	

```

Pro Ser Leu Leu Pro Asp Ser Pro Val Ala Gln Leu His Ala Ser Leu
         95           100           105

Leu Gly Leu Ser Gln Leu Leu Gln Pro Glu Gly His His Trp Glu Thr
        110          115          120

Gln Gln Ile Pro Ser Leu Ser Pro Ser Gln Pro Trp Gln Arg Leu Leu
        125          130          135

Leu Arg Phe Lys Ile Leu Arg Ser Leu Gln Ala Phe Val Ala Val Ala
        140          145          150          155

Ala Arg Val Phe Ala His Gly Ala Ala Thr Leu Ser Pro
        .           160          165

```

ctc aag gac aac agc cag ttc tgc ttg caa agg atc cgc caa ggt ctg Leu Lys Asp Asn Ser Gln Phe Cys Leu Gln Arg Ile Arg Gln Gly Leu	406
65 70 75	
gct ttt tat aag cac ctg ctt gac tct gac atc ttc aaa ggg gag cct Ala Phe Tyr Lys His Leu Leu Asp Ser Asp Ile Phe Lys Gly Glu Pro	454
80 85 90	
gct cta ctc cct gat agc ccc atg gag caa ctt cac acc tcc cta cta Ala Leu Leu Pro Asp Ser Pro Met Glu Gln Leu His Thr Ser Leu Leu	502
95 100 105	
gga ctc agc caa ctc ctc cag cca gag gat cac ccc cg ^g gag acc caa Gly Leu Ser Gln Leu Leu Gln Pro Glu Asp His Pro Arg Glu Thr Gln	550
110 115 120 125	
cag atg ccc agc ctg agt tct agt cag cag tgg cag cgc ccc ctt ctc Gln Met Pro Ser Leu Ser Ser Gln Gln Trp Gln Arg Pro Leu Leu	598
130 135 140	
cgt tcc aag atc ctt cga agc ctc cag gcc ttt ttg gcc ata gct gcc Arg Ser Lys Ile Leu Arg Ser Leu Gln Ala Phe Leu Ala Ile Ala Ala	646
145 150 155	
cg ^g gtc ttt gcc cac gga gca gca act ctg act gag ccc tta gtg cca Arg Val Phe Ala His Gly Ala Ala Thr Leu Thr Glu Pro Leu Val Pro	694
160 165 170	
aca gct taaggatgcc caggttccca tggctaccat gataagacta atctatcagc Thr Ala	750
175	
ccagacatct accagttaat taacccatta ggacttgtgc tggctttgtt tcgtttgtt	810
tgcgtgaagg gcaaggcac cattattaaa gagaaaaagaa acaaacccca gagcaggcag	870
ctggcttagag aaaggagctg gagaagaaga ataaagtctc gagcccttgg ctttggaaagc	930
gggcaagcag ctgcgtggcc tgagggaaag ggggcggtgg catcgagaaa ctgtgagaaa	990
acccagagca tcagaaaaag tgagcccagg cttggccat tatctgtaag aaaaacaaga	1050
aaagggaaac attatactt cctgggtggc tcagggaaat gtgcagatgc acagtactcc	1110
agacagcagc tctgtacctg cctgctctgt ccctcagttc taacagaatc tagtcactaa	1170
gaactaacag gactaccaat acgaactgac aaa	1203

<210> 4

<211> 196

<212> PRT

<213> Unknown Organism

<223> Description of Unknown Organism: surmised Mus sp.

<400> 4

Met Leu Asp Cys Arg Ala Val Ile Met Leu Trp Leu Leu Pro Trp Val	
-20 -15 -10	

Thr Gln Gly Leu Ala Val Pro Arg Ser Ser Ser Pro Asp Trp Ala Gln	
-5 -1 1 5 10	

Cys Gln Gln Leu Ser Arg Asn Leu Cys Met Leu Ala Trp Asn Ala His
 15 20 25

Ala Pro Ala Gly His Met Asn Leu Leu Arg Glu Glu Glu Asp Glu Glu
 30 35 40

Thr Lys Asn Asn Val Pro Arg Ile Gln Cys Glu Asp Gly Cys Asp Pro
 45 50 55

Gln Gly Leu Lys Asp Asn Ser Gln Phe Cys Leu Gln Arg Ile Arg Gln
 60 65 70 75

Gly Leu Ala Phe Tyr Lys His Leu Leu Asp Ser Asp Ile Phe Lys Gly
 80 85 90

Glu Pro Ala Leu Leu Pro Asp Ser Pro Met Glu Gln Leu His Thr Ser
 95 100 105

Leu Leu Gly Leu Ser Gln Leu Leu Gln Pro Glu Asp His Pro Arg Glu
 110 115 120

Thr Gln Gln Met Pro Ser Leu Ser Ser Ser Gln Gln Trp Gln Arg Pro
 125 130 135

Leu Leu Arg Ser Lys Ile Leu Arg Ser Leu Gln Ala Phe Leu Ala Ile
 140 145 150 155

Ala Ala Arg Val Phe Ala His Gly Ala Ala Thr Leu Thr Glu Pro Leu
 160 165 170

Val Pro Thr Ala
 175

<210> 5
<211> 102
<212> PRT
<213> Unknown Organism

<220>
<223> Description of Unknown Organism: surmised *Sus* sp.

<400> 5
Ser Cys Leu Gln Arg Ile His Gln Gly Leu Val Phe Tyr Glu Lys Leu
1 5 10 15

Leu Gly Ser Asp Ile Phe Thr Gly Glu Pro Ser Leu His Pro Asp Gly
20 25 30

Ser Val Gly Gln Leu His Ala Ser Leu Leu Gly Leu Arg Gln Leu Leu
35 40 45

Gln Pro Glu Gly His His Trp Glu Thr Glu Gln Thr Pro Ser Pro Ser
50 55 60

Pro Ser Gln Pro Trp Gln Arg Leu Leu Leu Arg Leu Lys Ile Leu Arg
65 70 75 80

Ser Leu Gln Ala Phe Val Ala Val Ala Ala Arg Val Phe Ala His Gly

6

85

90

95

Ala Ala Thr Leu Ser Gln
100